

## CLAIMS

1. (Previously presented) ~~An automated software distribution~~ A method comprising:  
~~receiving a request to access a software distribution system;~~  
~~determining the request is from a registered user;~~  
determining whether ~~the~~ a registered user of a software distribution system is authorized to perform ~~an~~ internal software development activity corresponding to one or more software projects in the software distribution system, where the internal software development activity includes: ~~publishing downloadable software to the software distribution system;~~  
~~providing the registered user access to tools that facilitate the development of the software projects when the registered user is authorized to perform internal software development activity, where the tools create or modify downloadable software associated with the software projects;~~  
populating the software distribution system with data associated with ~~the~~ downloadable software including at least product release information corresponding to the downloadable software or packaging information that maps the downloadable software to a displayable image corresponding to the downloadable software;  
receiving requisite supervisory authorization to proceed with a publication of the downloadable software, where the requisite supervisory authorization indicates a manager of the software distribution system, other than the registered user, approved the publication of the downloadable software;  
publishing the downloadable software to the software distribution system according to the data populated in the software distribution system, the publishing performed responsive to receiving the requisite supervisory authorization to proceed with the publication;  
determining whether the registered user is entitled to download software from the software distribution system, where the registered user is entitled to download software when the registered user has provided financial consideration for the software to be downloaded or established a service contract corresponding to the software to be downloaded; and  
providing the registered user access to software available for distribution that the registered user is entitled to download from the software distribution system, where the

registered user downloads software from the software distribution system when the registered user is entitled to download software from the software distribution system.

2. (Canceled)

3. (Currently Amended) The ~~automated software distribution~~ method of Claim 1 further comprising:

receiving a request to access the software distribution system, wherein the request is received from an internal user via an internal LAN; and  
determining the request is from the registered user.

4. (Currently Amended) The ~~automated software distribution~~ method of Claim 1 further comprising:

receiving a request to access the software distribution system, wherein the request is received from an external user via the Internet; and  
determining the request is from the registered user.

5. (Currently Amended) The ~~automated software distribution~~ method of Claim 1 further comprising granting the registered user access wherein said access to one or more software projects allows the registered user to access stored in an internal storage device of software products.

6. (Currently Amended) The ~~automated software distribution~~ method of Claim 1 further comprising granting the registered user access wherein said access to one or more software projects allows the registered user to download software code, make changes to the downloaded software, and upload the modified software to the software distribution system code.

7. (Currently Amended) The ~~automated software distribution~~ method of Claim 1 wherein a scalable software distribution system commerce transaction is engaged in an electronic commerce environment.

8. (Currently Amended) The ~~automated software distribution~~ method of Claim 1 wherein a software transaction process is utilized.

9. (Currently Amended) An ~~automated software distribution~~ method comprising:

- receiving a request to access a software distribution system;
- determining the request is from a registered user;
- determining whether the registered user is authorized to perform an internal software development activity corresponding to software projects in the software distribution system and determining whether the registered user is authorized to perform a commercial transaction to download software from the software distribution system;
- providing the registered user access to one or more software projects and tools that facilitate the development of the software projects when the registered user is authorized to perform internal software development activity, where the tools create or modify the software projects;
- determining whether the registered user is entitled to perform a commercial transaction to download software from the software distribution system, where the registered user is entitled to perform a commercial transaction with the software distribution system when the registered user has provided financial consideration for the software to be downloaded from the software distribution system or established a service contract corresponding to the software to be downloaded;
- providing the registered user access to software available for distribution that the registered user is entitled to download from the software distribution system, where the registered user downloads the software from the software distribution system when the registered user is both authorized and entitled to perform commercial transactions to download software from the software distribution system;
- storing and tracking information associated with both internal software development activity performed by registered users and commercial transactions resulting in software being downloaded from the software distribution system by registered users;
- confirming the registered user is authorized to publish downloadable software to the software distribution system;

populating the software distribution system with data corresponding to downloadable software with a software publishing tool available to registered users authorized to perform internal software development activities, the data includes software code, product release information corresponding to the downloadable software, and packaging information that maps the software code to a displayable image corresponding to the downloadable software;

receiving requisite supervisory authorization to proceed with the publication of the downloadable software, where the requisite supervisory authorization includes an accuracy check of the downloadable software by a manager of the software distribution system other than the registered user that populated the software distribution system with data corresponding to downloadable software; and

publishing the downloadable software to the software distribution system according to the data populated in the software distribution system, the publishing performed responsive to receiving the requisite supervisory authorization to proceed with the publication.

10. (Currently Amended) The ~~internal software publishing process~~ method of Claim 9 wherein the request is received from a software engineer that has built a software image ready for commercial release.

11. (Currently Amended) The ~~internal software publishing process~~ method of Claim 9 wherein  
the data population process includes a software distribution framework (SWDF) Information Model, a SWDF Product Model and a SWDF Packaging Model.

12. (Currently Amended) The ~~internal software publishing process~~ method of Claim 9 wherein a  
software distribution framework (SWDF) packaging model is completed by pulling data from a database that includes features that map a software image and software product code.

13. (Currently Amended) The ~~internal software publishing process~~ method of Claim 9 wherein

software distribution framework (SWDF) authorization information is checked to make sure the requester has appropriate role responsibility to engage in image publishing.

14. (Currently Amended) ~~The automated software distribution method of Claim 1, examining commercial transaction rights of the registered user; making a determination if the registered user has entitlement to proceed with a commercial transaction;~~  
~~when the registered user is not entitled to proceed with the commercial transaction,~~  
prompting the registered user to provide financial consideration for the software to be downloaded or to establish a service contract for the software to be downloaded;  
investigating to determine if whether the registered user successfully provided financial consideration for the software to be downloaded or to established a service contract for the software to be downloaded; and  
~~executing the commercial transaction when the registered user has provided financial consideration for the software to be downloaded or to established a service contract for the software to be downloaded.~~

15. (Currently Amended) A ~~commercial transaction process~~ method of Claim 14 wherein further comprising storing information on commercial transaction rights of the registered users in a software distribution framework (SWDF) system stores information on the commercial transaction rights of external customers.

16. (Currently Amended) A ~~commercial transaction process~~ method of Claim 15 wherein the a software distribution framework (SWDF) system stores information on entitlement ~~the entitlements~~ of external customers to engage in commercial transactions.

17. (Currently Amended) A ~~commercial transaction process~~ method of Claim 15 wherein software distribution framework (SWDF) ~~Entitlement Information~~ includes information on whether the registered user customer has established the a service contract or provided financial consideration paid money for the requested software to be downloaded product and if whether

the ~~customer~~ registered user has entitlement to download the ~~proceed the requested~~ software product is downloaded.

18. (Currently Amended) A ~~commercial transaction process~~ method of Claim 15 wherein ~~the a~~ commercial transaction process is an electronic commerce process.

19. (Currently Amended) A ~~commercial transaction process~~ method of Claim 15 wherein the software ~~product~~ comprises software image binary executables, readme information, installation instructions, product manuals, guide and software requirements, ~~and~~ software release note, ~~and~~ or software licensing key.

20. (Currently Amended) An automated software distribution system comprising:  
means for determining, according to instructions stored on a computer-readable medium, whether a user is entitled to perform an internal software development activity ~~according to instructions stored on a computer-readable medium~~, wherein said software development activity is accessible through said automated software distribution system;

~~means for providing the user access to tools that facilitate the development of the software projects according to instructions stored on the computer-readable medium when the user is authorized to perform internal software development activity, where the tools create or modify downloadable software associated with the software projects;~~

means for populating the software distribution system with data associated with the downloadable software including at least product release information corresponding to the downloadable software or packaging information that maps the downloadable software to a displayable image corresponding to the downloadable software;

means for receiving requisite supervisory authorization to proceed with a publication of the downloadable software, where the requisite supervisory authorization indicates a manager of the software distribution system, other than the registered user, approved the publication of the downloadable software;

means for publishing the downloadable software to the software distribution system according to the data populated in the software distribution system, the publishing performed

responsive to receiving the requisite supervisory authorization to proceed with the publication;  
and

means for determining whether the registered user is entitled to download software from the software distribution system, where the registered user is entitled to download software when the registered user has provided financial consideration for the software to be downloaded or established a service contract corresponding to the software to be downloaded; and

means for providing the registered user access to software available for distribution that the registered user is entitled to download from the software distribution system, where the registered user downloads software from the software distribution system when the registered user is entitled to download software from the software distribution system.

21. (Currently Amended) An automated software distribution system of Claim 20 further comprising means for organizing software distribution information ~~wherein said information associated with an automated software distribution method is organized in accordance with~~ software distribution framework (SWDF) modules that manage the software distribution information and activities in accordance with SWDF models.

22. (Currently Amended) An automated software distribution system of Claim 21 wherein said software distribution information ~~associated with an automated software distribution method~~ is organized in accordance with a software distribution framework (SWDF) database, wherein SWDF database schema components are configured in accordance with four categories comprising regular database tables, composite link database tables, associating link database tables and runtime information query components.

23. (Currently Amended) An automated software distribution system of Claim 21 wherein said software distribution information ~~associated with an automated software distribution method~~ is tracked and manipulated by means for indicating classes, attributes and operations.

24. (Currently Amended) An automated software distribution system of Claim 21 further comprising a means for managing different areas of framework information including user

information, authorization information, software information, configuration information, commerce information, publication information, and distribution information.

25. (Currently Amended) An automated software distribution system of Claim 21 wherein a link database is table is a persistent storage for the relationship of two objects.

26. (Currently Amended) An automated software distribution apparatus comprising:  
a bus for communicating information associated with an automated software distribution method;

an input mechanism for receiving requests from a user for access to said information, said user having associated transaction rights;

a computer usable medium to store instructions;

a processor, when executing one or more instructions stored by the computer usable medium, is configured to:

determine whether the registered user is authorized to perform an internal software development activity corresponding to software projects in the software distribution system and determining whether the registered user is authorized to perform a commercial transaction to download software from the software distribution system;

provide the registered user access to one or more software projects and tools that facilitate the development of the software projects when the registered user is authorized to perform internal software development activity, where the tools to modify the software projects;

determine whether the registered user is entitled to perform a commercial transaction to download software from the software distribution system, where the registered user is entitled to perform a commercial transaction with the software distribution system when the registered user has provided financial consideration for the software to be downloaded from the software distribution system or established a service contract corresponding to the software to be downloaded;

provide the registered user access to software available for distribution that the registered user is entitled to download from the software distribution system, where the registered user downloads the software from the software distribution system when the



registered user is both authorized and entitled to perform commercial transactions to download software from the software distribution system; and  
a memory for storing and tracking said information associated with an automated software distribution method, wherein said automated software distribution method utilizes a scalable software distribution framework and object model in which objects are linked together by unique object identifiers;

wherein the processor is further configured ~~adapted~~ to:

confirm the registered user is authorized to publish downloadable software to the software distribution system;

populate the software distribution system with data corresponding to downloadable software with a software publishing tool available to registered users authorized to perform internal software development activities, the data includes software code, product release information corresponding to the downloadable software, and packaging information that maps the software code to a displayable image corresponding to the downloadable software;

receive requisite supervisory authorization to proceed with the publication of the downloadable software, where the requisite supervisory authorization includes an accuracy check of the downloadable software by a manager of the software distribution system other than the registered user that populated the software distribution system with data corresponding to downloadable software; and

publish the downloadable software to the software distribution system according to the data populated in the software distribution system, the publishing performed responsive to receiving the requisite supervisory authorization to proceed with the publication.

27. (Canceled)

28. (Previously presented) The automated software distribution apparatus of Claim 26 wherein the processor is adapted to

examine the commercial transaction rights of the registered user;

make a determination if the registered user has entitlement to proceed with a commercial transaction;

when the registered user is not entitled to proceed with the commercial transaction, prompt the registered user to provide financial consideration for the software to be downloaded or to establish a service contract for the software to be downloaded;

investigate to determine if the registered user successfully provided financial consideration for the software to be downloaded or to established a service contract for the software to be downloaded; and

execute the requested commercial transaction when the registered user has provided financial consideration for the software to be downloaded or to established a service contract for the software to be downloaded.

29. (Previously presented) The automated software distribution apparatus of Claim 26 wherein an XML-based software distribution framework is utilized to enable automatic distribution of software over the Internet and World Wide Web (WWW) while coordinating, correlating and collecting information that assists software distribution management and maintenance activities.

30. (Previously presented) The automated software distribution apparatus of Claim 26 wherein software images are published based on software rights associated with a business rule/responsibility model and software products are distributed to customers based on commerce model.

31. (Previously presented) A computer usable medium having a computer readable program code embodied therein for causing a computer system to perform an automated software distribution method, said automated software distribution method comprising:

receiving a request to access a software distribution system;

determining the request is from a registered user;

determining whether the registered user has authorization to perform an internal software development activity corresponding to software projects in the software distribution system and determining whether the registered user is authorized to perform a commercial transaction to download software from the software distribution system;

providing the registered user access to one or more software projects and tools that facilitate the development of the software projects when the registered user is authorized to perform internal software development activity, where the tools create or modify the software projects;

determining whether the registered user is entitled to perform a commercial transaction to download software from the software distribution system, where the registered user is entitled to perform a commercial transaction with the software distribution system when the registered user has provided financial consideration for the software to be downloaded from the software distribution system or established a service contract corresponding to the software to be downloaded;

providing the registered user access to software available for distribution that the registered user is entitled to download from the software distribution system, where the registered user downloads the software from the software distribution system when the registered user is both authorized and entitled to perform commercial transactions to download software from the software distribution system;

utilizing a scaleable software distribution framework and object model in which objects are linked together by unique object identifiers;

confirming the registered user is authorized to publish downloadable software to the software distribution system;

populating the software distribution system with data corresponding to downloadable software with a software publishing tool available to registered users authorized to perform internal software development activities, the data includes software code, product release information corresponding to the downloadable software, and packaging information that maps the software code to a displayable image corresponding to the downloadable software;

receiving requisite supervisory authorization to proceed with the publication of the downloadable software, where the requisite supervisory authorization includes an accuracy check of the downloadable software by a manager of the software distribution system other than the registered user that populated the software distribution system with data corresponding to downloadable software; and

publishing the downloadable software to the software distribution system according to the data populated in the software distribution system, the publishing performed responsive to receiving the requisite supervisory authorization to proceed with the publication.

32. (Canceled)

33. (Currently Amended) The computer usable medium having the computer readable program code embodied therein for causing the computer system to perform the automated software distribution method ~~automated software distribution method~~ of Claim 31, the automated software distribution method further includes:

- examining the commercial transaction rights of the registered user;
- making a determination if the registered user has entitlement to proceed with a commercial transaction;
- when the registered user is not entitled to proceed with the commercial transaction, prompting the registered user to provide financial consideration for the software to be downloaded or to establish a service contract for the software to be downloaded;
- investigating to determine if a the registered user successfully provided financial consideration for the software to be downloaded or to established a service contract for the software to be downloaded; and
- executing the requested commercial transaction when the registered user has provided financial consideration for the software to be downloaded or to established a service contract for the software to be downloaded.

34. (Currently Amended) The computer usable medium having the computer readable program code embodied therein for causing the computer system to perform the automated software distribution method ~~automated software distribution method~~ of Claim 33, wherein an internal user is able to download software code, make changes and upload the modified code and both internal and external users are able to engage in a scaleable software distribution system commerce transaction.